

## Navajo Nation Aggregated Abandoned Uranium Mines (AUMs)



**Data format:** Shapefile

**File or table name:** NN\_AUM\_Poly\_Surf\_Undrgrnd

**Coordinate system:** Geographic

**Theme keywords:** Aggregated Abandoned Uranium Mines, Aggregated AUMs, Surficial AUMs, Underground AUMs

**Abstract:** This is a polygon shapefile of aggregated Abandoned Uranium Mines (AUMs) for the six Abandoned Uranium (AUM) Regions of the Navajo Nation. This dataset is a union of surface mapped AUMs (NN\_AUM\_Poly\_Surf.shp) and mapped underground AUMs (NN\_AUM\_Poly\_Surf\_Undrgrnd.shp). It was developed to facilitate analysis of the ground-water pathway for an EPA assessment of AUMs.

### FGDC and ESRI Metadata:

- [Identification Information](#)
- [Data Quality Information](#)
- [Spatial Data Organization Information](#)
- [Spatial Reference Information](#)
- [Entity and Attribute Information](#)
- [Distribution Information](#)
- [Metadata Reference Information](#)
- [Binary Enclosures](#)

Metadata elements shown with blue text are defined in the Federal Geographic Data Committee's (FGDC) [Content Standard for Digital Geospatial Metadata \(CSDGM\)](#). Elements shown with green text are defined in the [ESRI Profile of the CSDGM](#). Elements shown with a green asterisk (\*) will be automatically updated by ArcCatalog. ArcCatalog adds hints indicating which FGDC elements are mandatory; these are shown with gray text.

### Identification Information:

#### Citation:

##### Citation information:

**Originators:** TerraSpectra Geomatics

##### Title:

Navajo Nation Aggregated Abandoned Uranium Mines (AUMs)

**\*File or table name:** NN\_AUM\_Poly\_Surf\_Undrgrnd

**Publication date:** July 2007

**\*Geospatial data presentation form:** vector digital data

##### Publication information:

**Publication place:** San Francisco, CA

**Publisher:** U. S. Environmental Protection Agency, Region 9, Superfund Program

**\*Online linkage:**

[\\Terra\\_dc\Navajo\NAUM\\_NN\\_Summary\DB\AUM\NN\\_AUM\\_Poly\\_Surf\\_Undrgrnd.shp](\\Terra_dc\Navajo\NAUM_NN_Summary\DB\AUM\NN_AUM_Poly_Surf_Undrgrnd.shp)

**Description:****Abstract:**

This is a polygon shapefile of aggregated Abandoned Uranium Mines (AUMs) for the six Abandoned Uranium (AUM) Regions of the Navajo Nation. This dataset is a union of surface mapped AUMs (NN\_AUM\_Poly\_Surf.shp) and mapped underground AUMs (NN\_AUM\_Poly\_Surf\_Undrgrnd.shp). It was developed to facilitate analysis of the ground-water pathway for an EPA assessment of AUMs.

**Purpose:**

This dataset was developed to support the U.S. Environmental Protection Agency (USEPA) in its undertaking of an extensive scientific study to determine if abandoned uranium mines (AUM) and related mine features pose a significant risk to human health and the environment, and to identify areas requiring action to reduce risk for the Navajo Nation.

**\*Language of dataset:** en

**Time period of content:****Time period information:****Single date/time:**

**Calendar date:** July 2007

**Currentness reference:**

publication date

**Status:**

**Progress:** Complete

**Maintenance and update frequency:** None planned

**Spatial domain:****Bounding coordinates:**

**\*West bounding coordinate:** -111.640152

**\*East bounding coordinate:** -107.836992

**\*North bounding coordinate:** 37.412150

**\*South bounding coordinate:** 35.316133

**Local bounding coordinates:**

**\*Left bounding coordinate:** -111.640152

**\*Right bounding coordinate:** -107.836992

**\*Top bounding coordinate:** 37.412150

**\*Bottom bounding coordinate:** 35.316133

**Keywords:****Theme:**

**Theme keywords:** Aggregated Abandoned Uranium Mines, Aggregated AUMs, Surficial AUMs, Underground AUMs

**Theme keyword thesaurus:** None

**Place:**

**Place keywords:** Navajo Nation, Arizona, New Mexico, Utah, United States

**Place keyword thesaurus:** None

**Access constraints:** None

**Use constraints:**

This polygon dataset aggregates surface and underground mapped AUM polygons for the Navajo Nation. This results in not being able to distinguish surficial features of an AUM from the associated (by Mine\_ID) underground mapped AUM. Note that not all underground mines were mapped and therefore are not captured. This dataset covers the six Abandoned Uranium (AUM) Regions of the Navajo Nation.

Use of this data generally requires computer workstations with ESRI's Arc/Info (8.x or above), ArcGIS (8.x or above), or ArcView (3.x), or some other GIS or CAD software that is capable of reading or converting this dataset.

The data are provided "as-is," without warranty of any kind, either express or implied.

These data have been compiled as part of a desktop project to collect existing spatial data to support the study of Navajo abandoned uranium mines. No field verifications were undertaken as part of this desktop study.

**Point of contact:**

**Contact information:**

**Contact organization primary:**

**Contact organization:** U. S. Environmental Protection Agency, Region 9, Superfund Program

**Contact address:**

**Address type:** mailing and physical address

**Address:**

75 Hawthorne St (SFD 8-2)

**City:** San Francisco

**State or province:** CA

**Postal code:** 94105

**Country:** USA

**Contact voice telephone:** 415-972-3167

**Security information:**

**Security classification system:** None

\***Native dataset format:** Shapefile

\***Native data set environment:**

Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog 9.1.0.780

[Back to Top](#)

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## Data Quality Information:

**Attribute accuracy:**

**Attribute accuracy report:**

See the Attribute Accuracy Statements for NN\_AUM\_Poly.shp and NN\_AUM\_Poly\_Undrgnd.shp.

**Completeness report:**

This polygon dataset aggregates surface and underground mapped AUM polygons for the Navajo Nation. This results in not being able to distinguish surficial features of an AUM from

the associated (by Mine\_ID) underground mapped AUM. Note that not all underground mines were mapped and therefore are not captured. This dataset covers the six Abandoned Uranium (AUM) Regions of the Navajo Nation.

**Positional accuracy:**

**Horizontal positional accuracy:**

**Horizontal positional accuracy report:**

See the Positional Accuracy Statements for NN\_AUM\_Poly\_Surf.shp and NN\_AUM\_Poly\_Surf\_Undrgrnd.shp.

**Lineage:**

**Source information:**

**Source citation abbreviation:**

NN\_AUM\_Poly\_Surf.shp

**Source contribution:**

Navajo Nation Surface Extents of Abandoned Uranium Mines

**Source information:**

**Source citation abbreviation:**

NN\_AUM\_Poly\_Undrgrnd.shp

**Source contribution:**

Navajo Nation Underground Extents of Abandoned Uranium Mines

**Process step:**

**Process description:**

The polygon shapefiles NN\_AUM\_Poly\_Surf.shp and NN\_AUM\_Poly\_Undrgrnd.shp were Unioned and then dissolved on their coincident Mine\_ID fields, resulting in this shapefile. The attributes of NN\_AUM\_Poly\_Surf were joined back based on the Mine\_ID relate field, and reduced to the following limited set of attributes: Mine\_ID, Mine\_Name, NameSource, Aliases, and Alias\_Src.

Two new attributes were added:

Area\_sqm - Area in square meters (based on UTM, Zone 12, NAD83)

Stratum - identifies by "Surface" and "Underground and Surface" whether an AUM is known to exist at the surface only or is known to have surficial and underground components.

**Process software and version:** ESRI ArcGIS 9.1

**Process date:** July 2007

**Source used citation abbreviation:**

NN\_AUM\_Poly\_Surf.shp

**Source used citation abbreviation:**

NN\_AUM\_Poly\_Undrgrnd.shp

**Source produced citation abbreviation:**

NN\_AUM\_Poly\_Surf\_Undrgrnd.shp

**Process contact:**

**Contact information:**

**Contact organization primary:**

**Contact organization:** TerraSpectra Geomatics

**Contact address:**

**Address type:** mailing and physical address

**Address:**

2700 E Sunset Rd, Ste A-10

**City:** Las Vegas**State or province:** NV**Postal code:** 89120**Country:** USA[Back to Top](#)

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**Spatial Data Organization Information:**

\***Direct spatial reference method:** Vector

**Point and vector object information:****SDTS terms description:**

\***Name:** NN\_AUM\_Poly\_Surf\_Undrgnd

\***SDTS point and vector object type:** G-polygon

\***Point and vector object count:** 602

**ESRI terms description:**

\***Name:** NN\_AUM\_Poly\_Surf\_Undrgnd

\***ESRI feature type:** Simple

\***ESRI feature geometry:** Polygon

\***ESRI topology:** FALSE

\***ESRI feature count:** 602

\***Spatial index:** TRUE

\***Linear referencing:** FALSE

[Back to Top](#)

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**Spatial Reference Information:****Horizontal coordinate system definition:****Coordinate system name:**

\***Geographic coordinate system name:** GCS\_North\_American\_1983

**Geographic:**

\***Latitude resolution:** 0.000000

\***Longitude resolution:** 0.000000

\***Geographic coordinate units:** Decimal degrees

**Geodetic model:**

\***Horizontal datum name:** North American Datum of 1983

\***Ellipsoid name:** Geodetic Reference System 80

\***Semi-major axis:** 6378137.000000

\***Denominator of flattening ratio:** 298.257222

[Back to Top](#)

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**Entity and Attribute Information:**

**Detailed description:**

\***Name:** NN\_AUM\_Poly\_Surf\_Undrgnd

**Entity type:**

\***Entity type label:** NN\_AUM\_Poly\_Surf\_Undrgnd

\***Entity type type:** Feature Class

\***Entity type count:** 602

**Entity type definition:**

Aggregated Surface and Underground Extents of Abandoned Uranium Mines

**Attribute:**

\***Attribute label:** FID

\***Attribute alias:** FID

\***Attribute definition:**

Internal feature number.

\***Attribute definition source:**

ESRI

\***Attribute type:** OID

\***Attribute width:** 4

\***Attribute precision:** 0

\***Attribute scale:** 0

**Attribute domain values:**

\***Unrepresentable domain:**

Sequential unique whole numbers that are automatically generated.

**Attribute:**

\***Attribute label:** Shape

\***Attribute alias:** Shape

\***Attribute definition:**

Feature geometry.

\***Attribute definition source:**

ESRI

\***Attribute type:** Geometry

\***Attribute width:** 0

\***Attribute precision:** 0

\***Attribute scale:** 0

**Attribute domain values:**

\***Unrepresentable domain:**

Coordinates defining the features.

**Attribute:**

\***Attribute label:** Mine\_ID

\***Attribute alias:** Mine\_ID

\***Attribute type:** Number

\***Attribute width:** 4

**Attribute:**

\***Attribute label:** Mine\_Name

\***Attribute alias:** Mine\_Name

\***Attribute type:** String

\***Attribute width:** 50

**Attribute:**

\***Attribute label:** NameSource

\***Attribute alias:** NameSource

\***Attribute type:** String

\***Attribute width:** 35

**Attribute:**

\***Attribute label:** Aliases

\***Attribute alias:** Aliases

\***Attribute type:** String

\***Attribute width:** 175

**Attribute:**

\***Attribute label:** Alias\_Src

\***Attribute alias:** Alias\_Src

\***Attribute type:** String

\***Attribute width:** 50

**Attribute:**

\***Attribute label:** Area\_sqm

\***Attribute alias:** Area\_sqm

\***Attribute type:** Number

\***Attribute width:** 19

\***Attribute number of decimals:** 11

**Attribute:**

\***Attribute label:** Stratum

\***Attribute alias:** Stratum

\***Attribute type:** String

\***Attribute width:** 35

**Overview description:**

**Dataset overview:**

This shapefile contains 602 Aggregated AUMs as polygons.

**Entity and attribute overview:**

There are 7 thematic attributes, as follows:

Mine\_ID - arbitrary, unique identifier assigned to each of the AUM site

Mine\_Name - Primary mine name

NameSource - Skey source reference for the AUM Mine\_Name

Aliases - Alias or secondary mine names

Alias\_Src - Skey reference source for alias or secondary mine names

Area\_sqm - Area in square meters (based on UTM, Zone 12, NAD83)

Stratum - identifies by "Surface" and "Underground and Surface" whether an AUM is known to exist at the surface only or is known to have surficial and underground components.

[Back to Top](#)

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## Distribution Information:

### Distributor:

#### Contact information:

##### Contact organization primary:

**Contact organization:** U. S. Environmental Protection Agency, Region 9,  
Superfund Records Center

##### Contact address:

**Address type:** mailing address

##### Address:

95 Hawthorne St (SFD-7C)

**City:** San Francisco

**State or province:** CA

**Postal code:** 94105

**Country:** USA

**Contact voice telephone:** 415-536-2033

**Resource description:** E\_AUM\_Poly\_Surf\_Undrgnd.shp

### Distribution liability:

Although these data have been processed successfully on a computer system for the USEPA, no warranty expressed or implied is made by the USEPA or its contractors regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. No responsibility is assumed by USEPA or its contractors in the use of these data.

### Standard order process:

#### Digital form:

##### Digital transfer information:

\***Transfer size:** 0.475

\***Dataset size:** 0.475

### Custom order process:

Contact the USEPA for a custom order.

### Technical prerequisites:

Use of this data generally requires computer workstations with ESRI's Arc/Info (8.x or above), ArcGIS (8.x or above), or ArcView (3.x), or some other GIS or CAD software that is capable of reading or converting this dataset.

### Available time period:

#### Time period information:

##### Single date/time:

[Back to Top](#)

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## Metadata Reference Information:

\***Metadata date:** 20070730

\***Language of metadata:** en

### Metadata contact:

#### Contact information:

##### Contact person primary:

**Contact person:** Andrew Bain

**Contact organization:** U. S. Environmental Protection Agency, Region 9, Superfund Program

**Contact position:** Project Manager

##### Contact address:

**Address type:** mailing and physical address

##### Address:

75 Hawthorne St (SFD 8-2)

**City:** San Francisco

**State or province:** CA

**Postal code:** 94105

**Country:** USA

**Contact voice telephone:** 415-972-3167

\***Metadata standard name:** FGDC Content Standards for Digital Geospatial Metadata

\***Metadata standard version:** FGDC-STD-001-1998

\***Metadata time convention:** local time

**Metadata access constraints:** None.

**Metadata use constraints:**

None.

### Metadata security information:

**Metadata security classification system:** None

### Metadata extensions:

\***Online linkage:** <http://www.esri.com/metadata/esriprof80.html>

\***Profile name:** ESRI Metadata Profile

[Back to Top](#)

## Binary Enclosures:

### Thumbnail:

**Enclosure type:** Picture



[Back to Top](#)